

Notice of Allowability

Applicati n No.

09/944,939

Examin r

Baoquoc N. To

Applicant(s)

DANG ET AL.

Art Unit

2162

-- **Th MAILING DATE f this communication appears on the cover she t with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/25/2006.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 05/26/2006.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) f each sh et. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 05/26/2006 .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. 1, 5-8 and 12-20 are amended in the amendment filed on 04/226/2006. Claims 1-20 are pending in this application.

Drawings

2. The drawings filed on 08/31/2001 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Erin Ming, Reg. No. 47, 797 on May 25, 2006.

Please amend the application as follow:

1. (Currently Amended) A computer implemented method for dynamically changing attributes in an embedded-SQL application, the method comprising the steps of:
 - (a) providing an option within a standard SQL statement for specifying one or more ~~dynamic~~ new attributes ~~of~~ for at least one declared cursor; and

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(b) processing the standard SQL statement to ~~include~~ add or replace one or more pre-defined attributes of the specified one or more dynamic attributes in the at least one declared cursor with the specified one or more new attributes to dynamically transform the at least one declared cursor[[,]]; and

~~wherein the one or more dynamic attributes are in addition to or in replacement of one or more pre-defined attributes of the at least one declared cursor~~

(c) creating an executable form of the standard SQL statement using the dynamically transformed at least one declared cursor.

2. (Original) The method of claim 1, wherein the option providing step (a) further comprises the steps of (a1) providing an ATTRIBUTES option.

3. (Original) The method of claim 2, wherein option providing step (a) further comprises the steps of (a2) providing an option within a PREPARE SQL statement.

4. (Original) The method of claim 3, wherein the processing step (b) further comprises the steps of (b1) parsing the ATTRIBUTES option.

5. (Currently Amended) The method of claim 4, further comprising the step of (e d) resolving one or more conflicting or duplicate attributes.

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6. (Currently Amended) The method of claim 5, further comprising the step of (d e) placing the one or more resolved attributes in a parse tree.

7. (Currently Amended) The method of claim 1, further comprising the step of (e d) utilizing the specified one or more ~~dynamic~~ new attributes in a concatenated string for a dynamic cache system of a database server.

8. (Currently Amended) A system for dynamically changing attributes in an embedded-SQL application, the system comprising:

at least one computer processing device; and

a database management system installed on the at least one computer processing device, the database management system supporting provision of an option within a standard SQL statement for specifying one or more ~~dynamic~~ new attributes ~~of~~ for at least one declared cursor, and processing of the standard SQL statement to ~~include~~ add or replace one or more pre-defined attributes of the specified one or more dynamic attributes in the at least one declared cursor with the specified one or more new attributes to dynamically transform the at least one declared cursor, and creation of an executable form of the standard SQL statement using the dynamically transformed at least one declared cursor

~~wherein the one or more dynamic attributes are in addition to or in replacement of one or more pre-defined attributes of the at least one declared cursor.~~

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9. (Original) The system of claim 8, wherein provision of an option further comprises provision of an ATTRIBUTES option.

10. (Original) The system of claim 9, wherein provision of an option further comprises provision of an option within a PREPARE SQL statement.

11. (Original) The system of claim 10, wherein processing further comprises parsing the ATTRIBUTES option.

12. (Previously Presented) The system of claim 11, wherein the database management system further supports resolution of one or more conflicting or duplicate attributes.

13. (Previously Presented) The system of claim 12, wherein the database management system further supports placement of the one or more resolved attributes in a parse tree.

14. (Currently Amended) The system of claim 8, wherein the database management system further supports utilization of the specified one or more ~~dynamic~~ new attributes in a concatenated string for a dynamic cache system of a database server.

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15. (Currently Amended) A computer readable medium containing a computer program tangibly stored thereon for dynamically changing attributes in an embedded-SQL application, the computer program comprising instructions for:

providing an option within a standard SQL statement for specifying one or more dynamic new attributes of for at least one declared cursor; and

processing the standard SQL statement to ~~include~~ add or replace one or more pre-defined attributes of the specified one or more dynamic attributes in the at least one declared cursor with the specified one or more new attributes to dynamically transform the at least one declared cursor[[,]]; and

~~wherein the one or more dynamic attributes are in addition to or in replacement of one or more pre-defined attributes of the at least one declared cursor~~

creating an executable form of the standard SQL statement using the dynamically transformed at least one declared cursor.

16. (Previously Presented) The computer readable medium of claim 15, wherein providing an option further comprises providing an ATTRIBUTES option.

17. (Previously Presented) The computer readable medium of claim 16, wherein providing an option further comprises providing an option within a PREPARE SQL statement.

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18. (Previously Presented) The computer readable medium of claim 17, wherein processing further comprises parsing the ATTRIBUTES option.

19. (Previously Presented) The computer readable medium of claim 18, wherein the computer program further comprises instructions for resolving one or more conflicting or duplicate attributes.

20. (Previously Presented) The computer readable medium of claim 19, wherein the computer program further comprises instructions for placing the one or more resolved attributes in a parse tree.

Allowable Subject Matter

4. Claims 1-20 are allowed over prior art made of record.

The following is an examiner's statement of reasons for allowance:

As to claim 1, None of known prior art alone or in combination either teach or suggest "(a) providing an option within a standard SQL statement for specifying one or more new attributes for at least one declared cursor; (b) processing the standard SQL statement to add or replace one or more pre-defined attributes of the at least one declared cursor with the specified one or more new attributes to dynamically transform the at least one declared cursor" and in conjunction with "(c) creating an executable form of the standard SQL statement using the dynamically transformed at least one declared cursor."

Claims 2-7 are depended on claim 1; therefore, claims 2-7 are allowed under the same reason as to claim 1.

Claim 8 is the system to perform the step of claim 1; therefore, claim 8 is allowed under the same reason as to claim 1.

Claims 9-14 are depended on claim 8; therefore, claims 9-14 are allowed under the same reason as to claim 8.

Claims 15 is the computer readable medium for containing a computer program to perform the step of claim 1; therefore, claim 15 is allowed under the same reason as to claim 1.

Claims 16-20 are depended on claim 15; therefore, claims 16-20 are allowed under the same reason as to claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent:

Lohman et al. (US. Patent No. 6,317,738 B1) Patent date: 11/13/2001.

Stuart (US. Patent No. 6,446,935 B1) Patent date: 10/15/2002.

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NPL:

Quass et al. On-line warehouse view maintenance, International Conference on Management of Data, Proceeding of the 1997 ACM SIGMOD international conference on Management of data, 1997, page 393-404.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

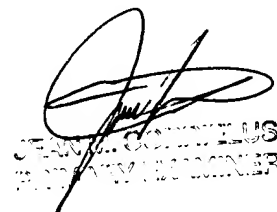
Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) –273-8300 [Official Communication]

BQ To

May 26th, 2006



BAOQUOC N. TO
EXAMINER